

ABSTRACT OF THE DISCLOSURE

The low temperature pyrolysis of shredded scrap vehicle tires and other rubber scrap material yields a char consisting of coarse, granular particles of carbon. Those granular particles are converted to ultrafine carbon products useful as fillers and pigments by means of resonance disintegration. During resonance disintegration the char granules and particles are subjected to intense high energy shock waves resulting in a carbon particle product in which typically over half of the carbon particulate volume is below one micron when dispersed in water. The surface properties of the carbon particles or of carbon blacks produced by conventional techniques can be further modified by reacting or coating the carbon with chemical compounds or coating agents during or immediately after the resonance disintegration to tailor the properties of the carbon product to its use.